

1 ?? No point in a cluster may be farther than two miles from its nearest neighbor
2 in the cluster.

3 PNR classifies the clusters it identifies as “main clusters” if they have five or more lines,
4 and “outlier” clusters if they have fewer than five lines.

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6 Once main clusters are identified in this fashion, the clustering algorithm calculates and
7 records a rectangle with the following properties: (1) its centroid is located at the same
8 point as the centroid of the convex polygon that defines the cluster;⁵ (2) its area is the
9 same as the area of the polygon that defines the cluster; and (3) its aspect ratio is the same
10 as the aspect ratio of the minimum rectangle that bounds the original cluster shape. Thus,
11 customers belonging to main clusters end up within the confines of a “rectangularized”
12 cluster shape that allows the model to estimate the type and amount of outside plant
13 required to serve each cluster. The aspect ratio is now calculated based on the actual
14 orientation of the bounding rectangle, rather than being projected onto north-south and
15 east-west axes. The cluster type and shape information, as well as other data about each
16 cluster as listed in the Cluster Input Data Table in Section 6.1.1 of RAM-2, including the
17 strand distance calculated by HM 5.2a-MA, become the demographic input data for the
18 Model calculations.

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(continued)

capacity into account. Normalizing line counts to wire center totals may also cause there to be more than five lines in a remote cluster, or, on rare occasions, fewer than five lines in a main cluster.

⁵ In lay terms, a convex polygon is one whose internal angles are less than 180 degrees, meaning that it “bulges outward” at each of its vertices.